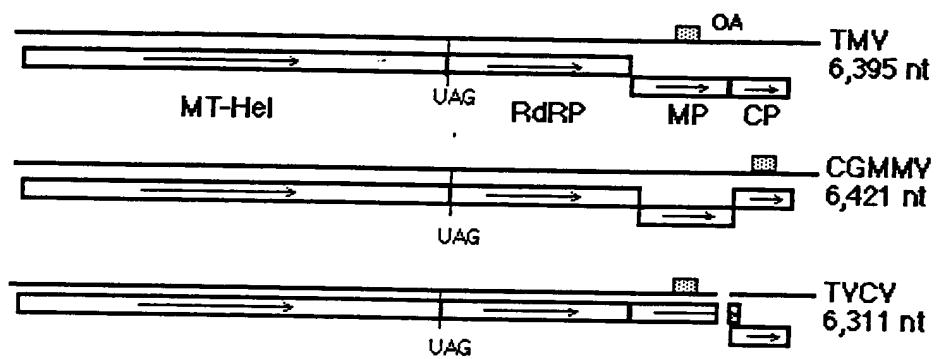


**FIGURE 1**



## FIGURE 2

- D13367 Gb(84)\_vi:MTVCP Tobacco mosaic virus CP gene. 7/94 474bp.
- D13438 Em(40)\_vi:MTVGRNA Gb(84)\_vi:MTVGRNA Tobacco mosaic virus genomic RNA. 12/93 6,507bp.
- D17458 Em(40)\_vi:MTV30KP Gb(84)\_vi:MTV30KP Tobacco mosaic virus (TMV) RNA for 30K protein, complete cds. 3/94 795bp.
- D38444 Em(44)\_vi:Mtvcg Gb(90)\_vi:Mtvcg Tobacco mosaic virus RNA. 10/94 6,303bp.
- J02412 Em(40)\_vi:TO30KOM Gb(84)\_vi:MTV30KOM tobacco mosaic virus 30k protein gene. 4/90 961bp.
- J02413 Em(40)\_vi:TOC30KCP Gb(84)\_vi:MTV30KCP tobacco mosaic virus(cowpea strain) 30k & coat protein genes. 4/90 1,800bp.
- J02415 Gb(84)\_vi:MTVVCG Tobacco mosaic virus (strain vulgare), complete genome. 9/88 6,395bp.
- L11665 Em(40)\_vi:MTVNGHYPE Gb(84)\_vi:MTVNGHYPER Tobacco mosaic virus RNA. 8/93 6,506bp
- L35073 Gb(84)n:MTVCOATPRA Tobacco mosaic virus coat protein, complete cds. 8/94 678bp.
- L35074 Gb(84)n:MTVCOATPRO Tobacco mosaic virus coat protein, complete cds. 8/94 680bp.
- M19101 Em(40)\_sy:AGVCHY Gb(84)\_sy:SYNRMTVCHY Tobacco mosaic virus/calf chymosin recombined mRNA, promoter and 5' end. 7/89 101bp.
- M19102 Em(40)\_sy:AGVLSZ Gb(84)\_sy:SYNRMTVLSZ Tobacco mosaic virus/chicken lysozyme recombined mRNA, promotor and 5' end. 7/89 107bp
- M19103 Em(40)\_sy:AGVCAT Gb(84)\_sy:SYNRMTVCAT Tobacco mosaic virus/plasmid pJII2 chloramphenicol transferase recombined mRNA, leader and 5'
- M19104 Em(40)\_sy:AGVNTP Gb(84)\_sy:SYNRMTVNTP Tobacco mosaic virus/plasmid pJII3 neomycin phosphotransferase II recombined mRNA, leader and 5'
- M19105 Em(40)\_sy:AGVGUSA Gb(84)\_sy:SYNVGUSA Tobacco mosaic virus/plasmid pJII119 beta-glucuronidase recombined mRNA, leader and 5' end. 7
- M19106 Em(40)\_sy:AGVGUSB Gb(84)\_sy:SYNVGUSB Tobacco mosaic virus/plasmid pJII139 beta-glucuronidase recombined mRNA, leader and 5' end. 7
- M24809 Em(40)\_vi:TOBMTVGT Gb(84)\_vi:MTVGTAMV tobacco mosaic virus RNA, 3' end. 2/90 72bp.
- M24955 Em(40)\_vi:MTVU1RAA Gb(84)\_vi:MTVU1RAA Tobacco mosaic virus (U1) omega RNA. 9/90 70bp.
- M24992 Gb(84)\_vi:MTVU2RAA Tobacco mosaic virus (U2) omega RNA. 9/89 93bp.
- V01405 Em(40)\_vi:TOTMV1 Gb(84)\_vi:TOTMV1 Tobacco mosaic virus (TMV) RNA 5' coding region (nucleotides 69 to 236). 7/89 168bp.
- V01407 Em(40)\_vi:TOTMV3 Gb(84)\_vi:TOTMV3 Two tobacco mosaic virus genes (viral transport and coat protein). 9/93 961bp.
- V01408 Em(40)\_vi:TOTMV4 Gb(84)\_vi:TOTMV4 Tobacco mosaic virus genome (variant 1). 7/83 6,395bp
- V01409 Em(40)\_vi:TOTMV5 Gb(84)\_vi:TOTMV5 Tobacco mosaic virus genome (variant 2). 7/83 6,398bp.
- X00052 Em(40)\_vi:TOTMV6 Gb(84)\_vi:TOTMV6 Tobacco mosaic virus (TMV) common strain OM. 5'-terminal region. 6/85 275bp.
- X00053 Em(40)\_vi:TOTMV7 Gb(84)\_vi:TOTMV7 Tobacco mosaic virus tomato (TMV) strain L. 5'-terminal region. 6/85 278bp.

## FIGURE 2 (continued)

- X02144 Em(40)\_vi:TOTMV8 Gb(84)\_vi:TOTMV8 Tobacco mosaic virus tomato strain (L) genome. 9/93 6,384bp.
- X66047 Em(40)\_vi:TMV54KDA Gb(84)\_vi:TMV54KDA Tobacco Mosaic Virus RNA for 54 kDa protein. 6/92 1,566bp.
- X68110 Em(40)\_vi:TMVCG Gb(84)\_vi:TMVCG Tobacco mosaic virus, complete genome. 10/92 6,395bp.
- X70882 Em(40)\_vi:TMVPM2CP Gb(84)\_vi:TMVPM2CP Tobacco mosaic virus PM2 mRNA for capsid protein. 7/93 765bp
- X70883 Em(40)\_vi:TMVDT1CP Gb(84)\_vi:TMVDT1CP Tobacco mosaic virus DT1 mRNA for capsid protein. 7/93 765bp.
- X70884 Em(40)\_vi:TMVDT2CP Gb(84)\_vi:TMVDT2CP Tobacco mosaic virus DT2 mRNA for capsid protein. 7/93 763bp.
- X70885 Em(40)\_vi:TMVDT1GCP Gb(84)\_vi:TMVDT1GCP Tobacco mosaic virus DT1G mRNA for capsid protein. 7/93 763bp.
- Z29370 Em(40)\_vi:TMVRPTPCP Gb(84)\_vi:TMVRPTPCP Tobacco mosaic virus (Crucifer) genomic RNA for RNA-dependent RNA polymerase; 122K protein.
- M25782 Em(43)\_vi:Sllcp Gb(89)\_vi:Sllcp Satellite tobacco mosaic virus coat protein RNA, complete cds. 11/94 1,058bp.

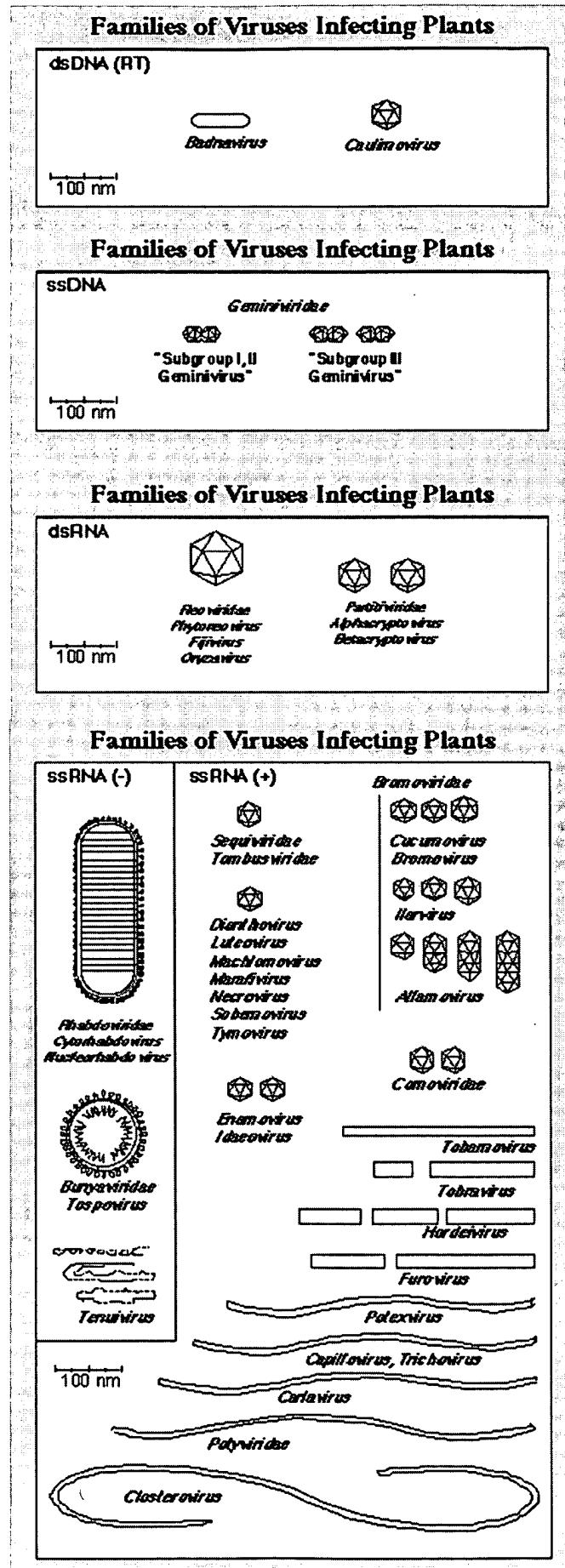


Figure 3

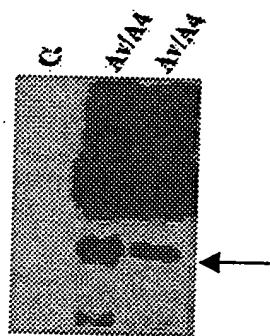
#### FIGURE 4

- J02001 Gb(84)\_vi:MAARNA23 alfalfa mosaic virus (Q strain) rna2 3' end. 2/85 228bp.
- J02003 Em(40)\_vi:ALRNA3 Gb(84)\_vi:MAARNA3 alfalfa mosaic virus rna 3 35kd protein leader sequence. 4/90 318bp.
- J02005 Gb(84)\_vi:MAARNA35 alfalfa mosaic virus (strain 425) rna3 5' end. 2/85 101bp.
- K02702 Gb(84)\_vi:MAACG2Z Alfalfa mosaic virus (strain 425 Leiden) RNA 2 of complete genome. 9/88 2,593bp.
- K02703 Em(40)\_vi:ALMRNA3 Gb(84)\_vi:MAACG3Z Alfalfa mosaic virus (strain 425 Madison) RNA 3 of complete genome. 4/90 2,037bp
- K03542 Em(40)\_vi:MAARNA3L Gb(84)\_vi:MAARNA3L Alfalfa mosaic virus RNA 3 encoding viral coat protein, complete.B. 4/90 2,142bp.
- L00161 Gb(84)\_vi:MAARNA33 Alfalfa mosaic virus (strain Q) RNA 3, 3' end. 8/86 230bp
- L00162 Em(40)\_vi:ALMAARNA4 Gb(84)\_vi:MAARNA4 Alfalfa mosaic virus (strain 425 Leiden) RNA 4 encoding viral coat protein. 5/94 964bp.
- L00163 Em(40)\_vi:ALMAACG1Z Gb(84)\_vi:MAACG1Z Alfalfa mosaic virus (strain 425 Leiden) RNA 1 of complete genome. 5/94 3,644bp.
- L00164 Gb(84)\_vi:MAARNA13 Alfalfa mosaic virus (strain Q) RNA 1. 8/86 226bp.
- M10826 Em(40)\_vi:MAARNA01 Gb(84)\_vi:MAARNA4AX Alfalfa mosaic virus (AlMV) RNA 4, 3' terminal fragment 29C. 7/91 91bp.
- M10851 Em(40)\_vi:MAARNA4A Gb(84)\_vi:MAARNA4A Alfalfa mosaic virus RNA 4, 5' terminal region. 7/89 74bp.
- M25004 Em(40)\_vi:ALMAARNAA Gb(84)\_vi:MAARNAAA Alfalfa mosaic virus RNA 3 or 4, 3' end. 4/92 113bp.
- M25005 Em(40)\_vi:ALMAARNAB Gb(84)\_vi:MAARNAB Alfalfa mosaic virus RNA 2, 3' end. 4/92 103bp.
- M25006 Em(40)\_vi:ALMAARNAC Gb(84)\_vi:MAARNAC Alfalfa mosaic virus RNA 1, 3' end. 4/92 110bp.
- M25452 Em(40)\_vi:ALMAARNA1 Gb(84)\_vi:MAARNA4D Alfalfa mosaic virus RNA 4 RNA fragment. 4/92 62bp.
- M35975 Em(40)\_vi:ALMAARNA Gb(84)\_vi:MAARNA1A Alfalfa mosaic virus (strain AlMV-S) 5' end of RNA-1. 12/90 163bp.
- M35976 Em(40)\_vi:ALMAAR01 Gb(84)\_vi:MAARNA1B Alfalfa mosaic virus (strain AlMV-B) 5' end of RNA-1. 12/90 115bp.
- M36389 Em(40)\_vi:ALMAAR02 Gb(84)\_vi:MAARNA2A Alfalfa mosaic virus (strain AlMV-S) 5' end of RNA-2. 12/90 108bp.
- M36390 Em(40)\_vi:ALMAAR03 Gb(84)\_vi:MAARNA2B Alfalfa mosaic virus (strain AlMV-B) 5' end of RNA-2. 12/90 109bp.
- M36391 Em(40)\_vi:ALMAAR04 Gb(84)\_vi:MAARNA3B Alfalfa mosaic virus (strain AlMV-S) 5' end of RNA-3. 12/90 305bp.
- M36392 Em(40)\_vi:ALMAAR05 Gb(84)\_vi:MAARNA3C Alfalfa mosaic virus (strain AlMV-B) 5' end of RNA-3. 12/90 290bp.

- M59241 Em(40)\_vi:ALMAA32K Gb(84)\_vi:MAA32KDMP Alfalfa mosaic virus 32 kDa movement protein and coat protein RNA, complete cds. 8/92 2,188bp.
- S55890 Em(40)\_vi:S55890 Gb(84)\_vi:S55890 RNA-3 coat protein homolog, alfalfa mosaic virus RNA-3 32K protein homolog (RNA-2) (raspberry bushy dwarf virus, Genomic RNA, 2231 nt).
- U12509 Em(43)\_vi:Am12509 Gb(89)\_vi:Amu12509 Alfalfa mosaic virus NZ1 RNA4 coat protein mRNA, complete cds. 8/94 876bp.
- U12510 Em(43)\_vi:Am12510 Gb(89)\_vi:Amu12510 Alfalfa mosaic virus NZ2 RNA4 coat protein mRNA, complete cds. 8/94 876bp.
- V00044 Em(40)\_vi:ALALM1 Gb(84)\_vi:ALALM1 5' end of alfalfa mosaic virus RNA 1. 5/94 61bp.
- V00045 Em(40)\_vi:ALALM2 Gb(84)\_vi:ALALM2 5' end of alfalfa mosaic virus RNA 2. 5/94 13bp.
- V00046 Em(40)\_vi:ALALM3 Gb(84)\_vi:ALALM3 5' end of alfalfa mosaic virus RNA 3. 5/94 101bp.
- V00047 Em(40)\_vi:ALALM4 Gb(84)\_vi:ALALM4 Intercistronic junction in alfalfa mosaic virus RNA 3. 5/94 122bp.
- V00048 Em(40)\_vi:ALALM5 Gb(84)\_vi:ALALM5 alfalfa mosaic virus RNA 4 coding for the coat protein. 5/94 881bp.
- V00049 Em(40)\_vi:ALALM6 Gb(84)\_vi:ALALM6 3' end of alfalfa mosaic virus RNA 1. 7/91 226bp.
- V00050 Em(40)\_vi:ALALM7 Gb(84)\_vi:ALALM7 3' end of alfalfa mosaic virus RNA 2. 7/91 228bp.
- V00051 Em(40)\_vi:ALALM8 Gb(84)\_vi:ALALM8 3' end of alfalfa mosaic virus RNA 3. 7/91 230bp.
- V00052 Em(40)\_vi:ALAM01 Gb(84)\_vi:ALAM01 Alfalfa mosaic virus RNA 1 fragment. (Obtained after digestion with ribonuclease T1.). 5/94 8
- V00053 Em(40)\_vi:ALAM02 Gb(84)\_vi:ALAM02 Alfalfa mosaic virus RNA 1 fragment. (Obtained after digestion with ribonuclease T1.). 5/94 6
- V00054 Em(40)\_vi:ALAM03 Gb(84)\_vi:ALAM03 Alfalfa mosaic virus RNA 1 fragment. (Obtained after digestion with ribonuclease T1.). 5/94 4
- V00055 Em(40)\_vi:ALAM04 Gb(84)\_vi:ALAM04 Alfalfa mosaic virus RNA 1 fragment. (Obtained after digestion with ribonuclease T1.). 5/94 4
- V00056 Em(40)\_vi:ALAM05 Gb(84)\_vi:ALAM05 Alfalfa mosaic virus RNA 1 fragment. (Obtained after digestion with ribonuclease T1.). 5/94 4
- V00057 Em(40)\_vi:ALAM06 Gb(84)\_vi:ALAM06 Alfalfa mosaic virus RNA 1 fragment. (Obtained after digestion with ribonuclease T1.). 5/94 3
- V00058 Em(40)\_vi:ALAM07 Gb(84)\_vi:ALAM07 Alfalfa mosaic virus RNA 1 fragment. (Obtained after digestion with ribonuclease T1.). 5/94 3
- V00059 Em(40)\_vi:ALAM08 Gb(84)\_vi:ALAM08 Alfalfa mosaic virus RNA 1 fragment. (Obtained after digestion with ribonuclease T1.). 5/94 3
- V00060 Em(40)\_vi:ALAM09 Gb(84)\_vi:ALAM09 Alfalfa mosaic virus RNA 1 fragment. (Obtained after digestion with ribonuclease T1.). 5/94 2
- V00061 Em(40)\_vi:ALAM10 Gb(84)\_vi:ALAM10 Alfalfa mosaic virus RNA 1 fragment. (Obtained after digestion with ribonuclease T1.). 5/94 2

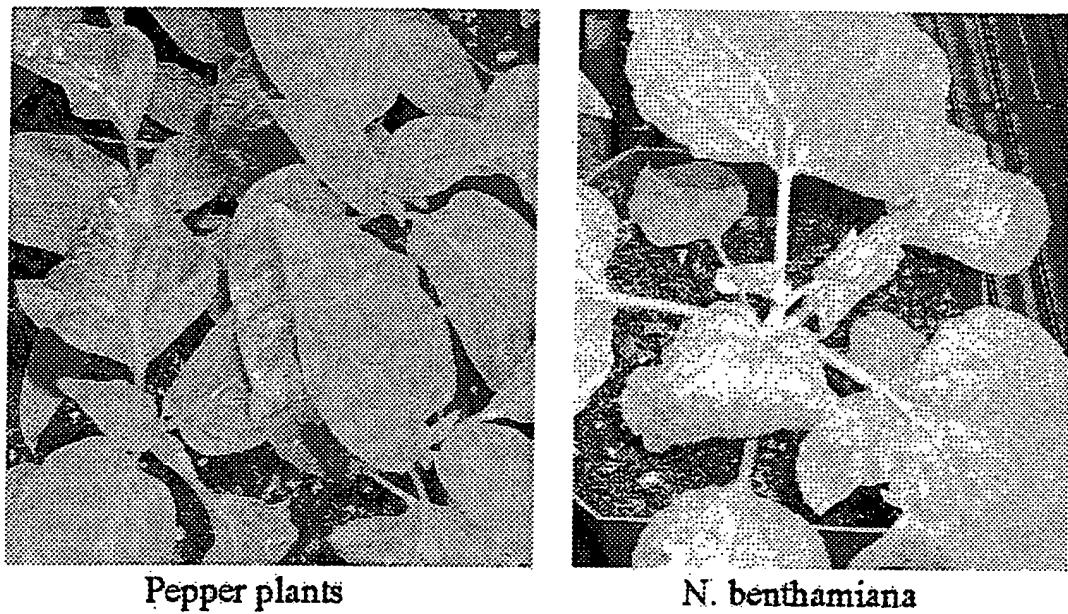
- V00062 Em(40)\_vi:ALAM11 Gb(84)\_vi:ALAM11 Alfalfa mosaic virus RNA 1 fragment. (Obtained after digestion with ribonuclease A.). 5/94 25
- V00063 Em(40)\_vi:ALAM12 Gb(84)\_vi:ALAM12 Alfalfa mosaic virus RNA 1 fragment. (Obtained after digestion with ribonuclease A.). 5/94 19
- V00064 Em(40)\_vi:ALAM13 Gb(84)\_vi:ALAM13 Alfalfa mosaic virus RNA 1 fragment. (Obtained after digestion with ribonuclease A.). 5/94 19
- V00065 Em(40)\_vi:ALAM14 Gb(84)\_vi:ALAM14 Alfalfa mosaic virus RNA 1 fragment. (Obtained after digestion with ribonuclease A.). 5/94 18
- V00066 Em(40)\_vi:ALAM15 Gb(84)\_vi:ALAM15 Alfalfa mosaic virus RNA 1 fragment. (Obtained after digestion with ribonuclease A.). 5/94 18
- V00067 Em(40)\_vi:ALAM16 Gb(84)\_vi:ALAM16 Alfalfa mosaic virus RNA 1 fragment. (Obtained after digestion with ribonuclease A.). 5/94 15
- V00068 Em(40)\_vi:ALAM17 Gb(84)\_vi:ALAM17 Alfalfa mosaic virus RNA 1 fragment. (Obtained after digestion with ribonuclease T1.). 5/94 9
- X00819 Em(40)\_vi:ALAM19 Gb(84)\_vi:ALAM19 Alfalfa mosaic virus (strain S) complete RNA 3 sequence. 9/93 2,055bp.
- X01572 Em(40)\_vi:A1MVRNA2 Gb(84)\_vi:A1MVRNA2 Alfalfa mosaic virus (A1M4) RNA 2. 7/91 2,593bp.
- M28374 Em(43)\_vi:Maatbts7a Gb(89)\_vi:Maatbts7a Alfalfa mosaic virus (clone 143) temperature-sensitive mutant Tbts7 RNA3 (coat protein-encoding)
- M28375 Em(43)\_vi:Maatbts7b Gb(89)\_vi:Maatbts7b Alfalfa mosaic virus (clone 112) temperature-sensitive mutant Tbts7 RNA3 (coat protein-encoding), 5' end fragment.

**FIGURE 5**



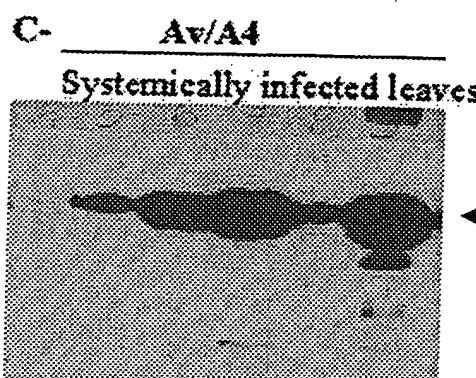
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FIGURE 6



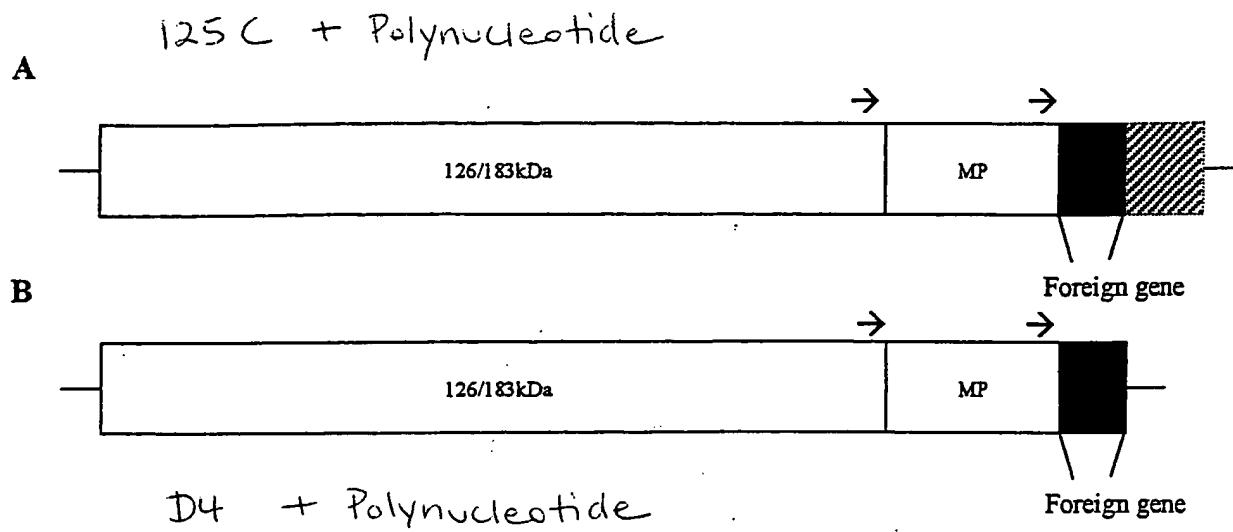
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FIGURE 7



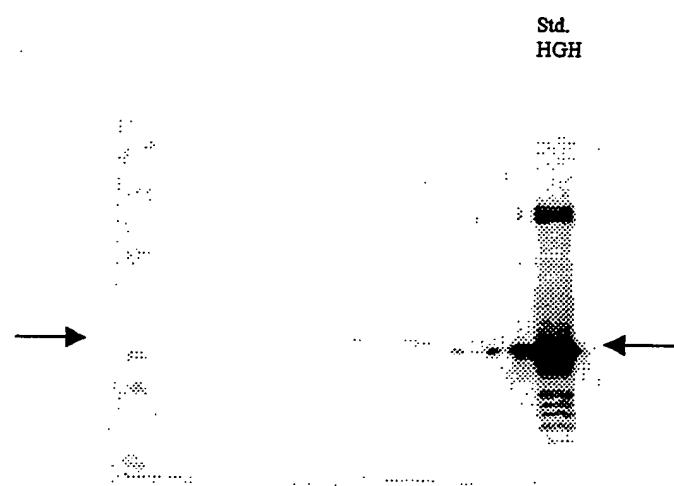
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FIGURE 8



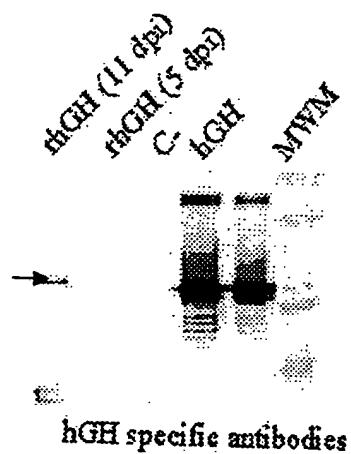
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**FIGURE 9**



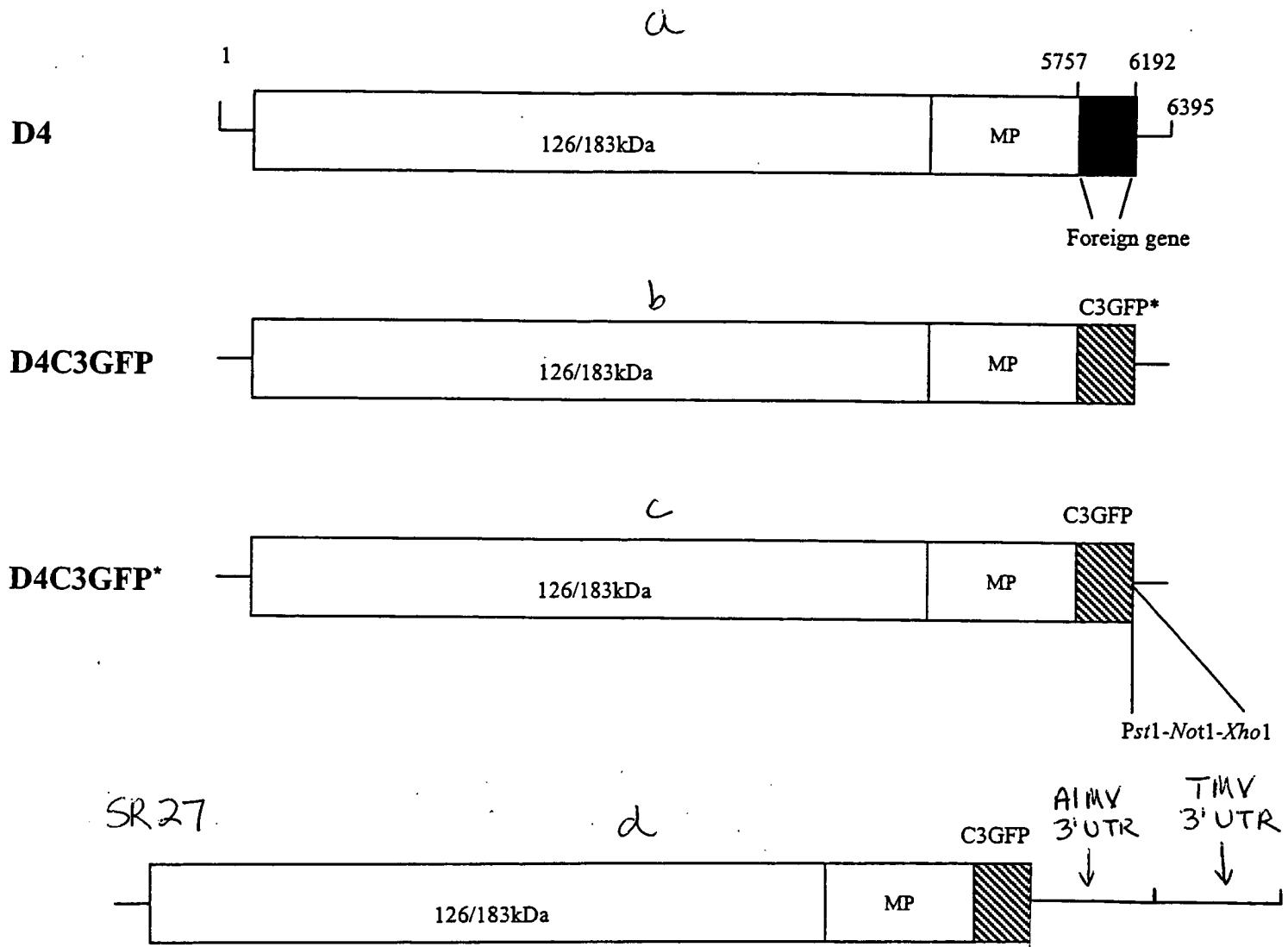
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FIGURE 10



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**FIGURE 11**



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FIGURE 12



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